
Subject: Re: mpcurvefit vs. a matlab fitting technique
Posted by [R.G. Stockwell](#) on Tue, 22 Jul 2008 16:46:46 GMT
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<sheilakanani@gmail.com> wrote in message
news:117be385-ff64-4b09-9a74-7b053fe3ee31@m36g2000hse.google groups.com...

> Hi there,

>

> I am trying to run an IDL program using mpcurvefit. The same program
> was written in Matlab and used lsqcurvefit for the fitting. I am
> having some serious issues with mpcurvefit (although it is better than
> the IDL curvefit!) and was hoping you can help me resolve these
> issues.

>

> I put 4 coefficients into the fitting routine then mpcurvefit "spits"
> out the fitted values for these coefficients. However, the program is
> not stable at all. For example

>

> If I put [9.4,0.24,0.77,-1.5]
> into the routine
> I get [9.538911, 0.15903937, 0.72624838, -1.3497545] out.

>

> But if I change the input even slightly eg [9.4,0.24,0.77,-1.5]
> I get totally different values out, eg [7.7098139, 0.19333284,
> 0.60223838, -0.85758867]

What are the results with matlab for these two inputs?

And i'd also suggest doing about 100 other cases, for both IDL and matlab,
to get some measure of the stability of your systems.

Are both solutions iterating the same number of times, is one of
the algorithms hitting it maxint limit? what are the step sizes of the
iterations etc.

Use double precision everywhere)are there implicit floats in the idl
code?).

Since we don't know what you are fitting it is hard to say anything more.

Cheers,
bob
